# State of Louisiana Department of Transportation and Development (DOTD) Materials and Testing Section Qualification Procedure For Qualified Products List 79

# PROTECTIVE COATINGS FOR MAINTENANCE OVERCOATING OF STEEL BRIDGES

#### **MATERIAL SPECIFICATION REFERENCE:**

DOTD Special Provisions, Subsection 811, Painting and Protective Coatings DOTD Special Provisions, Subsection 1008.

#### PRELIMINARY REQUIREMENTS:

#### **Qualified Product Evaluation Form**

Submit a standard "Qualified Product Evaluation Form" to the DOTD Materials and Testing Section Coordinator listed below, along with a letter requesting evaluation for the Qualified Products List. (copy of form attached)

#### **Product Data Sheets**

Include product data sheets to provide all pertinent information relative to the product to be evaluated, including, but not limited to, manufacturer's specifications, mixing instructions, recommended application procedure and rate, typical analysis and Materials Safety Data Sheet (MSDS).

#### Samples (to be furnished at no cost to the Department)

All containers shall be labeled showing the manufacturers brand name, lot number or batch number and date of manufacture.

One quart for each coat of paint shall be submitted for wet sample testing.

#### TEST REQUIREMENTS

# Surface Preparation

Minimum surface preparation shall be required to remove all debris, oils/grease, and loose paint. The minimum suggested preparation is a 1,500 psi pressure wash using a 20 degree nozzle held no more than 12 inches from the surface, and may contain a biodegradable detergent for the removal of oil/grease. Pressure washing shall not exceed 3,500 psi for evaluation purposes. Various other site specific surface preparation requirements may be identified in contract documents and will supersede the methods described herein for that specific contract.

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# **Laboratory Testing**

All tests to be performed in accordance with the requirements of the following:

PROPERTY	TEST METHOD
Pigment Content	ASTM D 3723
Density	ASTM D 1475
Total Solids Content	ASTM D 3723
Non-volatile in Vehicle Content	ASTM D 3723
Viscosity, Ku	ASTM D 562
Fineness of Grind, Hegman Scale	ASTM D 1210
Dry to Touch	ASTM D 1640
Dry Through	ASTM D 1640
Sag, Lenetta	ASTM D 4400
Infrared Spectrum	ASTM D 2621
X-ray Diffration	ASTM D 2321
pH	ASTM E 70

# Field Evaluation

The field evaluation is to be one of the following options to be determined by the Department:

- 1) Completion of overcoat field evaluation in accordance with Nepovercoat standards.
- 2) Completion of overcoat field evaluation in accordance with NTPEP standards.
- 3) Completion of overcoat field evaluation in accordance with LA DOTD standards.

If options one or two are used, the final test results of the field test areas are to be evaluated by the Materials Lab to determine minimum passing results. If the overcoat paint system meets minimum requirements, it is to be added to the QPL for overcoat systems.

If option three is used, the Department shall apply the overcoat paint system alongside the standard MS-285-003 alkyd paint system over an aged red lead paint system and or alternate system as determined by the QPL Coordinator After a three year evaluation, the paint system being evaluated shall perform as well or better than the MS-285-003 paint system in the areas of blistering, rusting, fading, chalking and adhesion. If the overcoat paint system meets minimum requirements, it is to be added to the QPL for overcoat systems.

**Total Evaluation Time** 

Laboratory testing – 1 month Field Evaluation – 36 months

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#### **GENERAL:**

Upon completion of the evaluation, the submitter will be notified in writing concerning the results of the evaluation and whether the product will or will not be added to the Qualified Products List. The Department reserves the right to reevaluate any product at any time.

# PROJECT ACCEPTANCE REQUIREMENTS:

Qualification of a product is not blanket approval for its use. Final acceptance of each lot or shipment is dependent upon test results which shall conform to the established specification requirements and which identify the sample as being representative of the product originally approved. The Department may require a compatibility test with the existing system to be overcoated prior to application.

For project acceptance, all materials shall be sampled according to DOTD Sampling Method S604-00 (Copy attached). All manufacturers are expected to comply with all sampling requirements. Manufacturers should thoroughly review the method prior to submitting any materials for qualification for this list.

### **REQUALIFICATION:**

Any product which has been disqualified and/or removed from the Qualified Products List will be considered for reevaluation only after submission of a formal request along with acceptable evidence that the problems causing the disqualification have been resolved in accordance with the DOTD Materials and Testing Section QPL Handling Procedure.

#### DOTD MATERIALS AND TESTING SECTION COORDINATOR

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Approved 01-05-06

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